

THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
PUBLIC HEARING

IN THE MATTER OF THE
DOUGLAS ROAD LANDFILL
SUPERFUND SITE

ORIGINAL

TRANSCRIPT OF PROCEEDINGS had at The United States
Environmental Protection Agency Public Hearing regarding the
Douglas Road Landfill Superfund Site, conducted at Walt Disney
Elementary School, 4015 North Filbert Road, Mishawaka, Indiana,
on Tuesday, December 5, 1995, commencing at 7:00 p.m.

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P R E S E N T

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1 (Meeting commenced at 7:00 p.m.)

2
3 MR. DAVE NOVAK: We'll get started now. We apologize
4 for taking a little bit extra time to get going, and then
5 we're going to take care of the media here in the process,
6 get the interview out of the way, too, while I go through
7 the introductions and some of the ground rules that we'll
8 be observing tonight.

9 I'm Dave Novak. I'm the Community Involvement
10 Coordinator for the sites here. I inherited in the last
11 couple of weeks all the Indiana sites at EPA in Chicago,
12 and this being -- I'm new to the project, I've known about
13 it for quite a while, but this is my first time to get
14 into the community and see the site and go around to see
15 the work that's going on. I'm happy to be involved with
16 it, and I think it's a project that -- I'm impressed with
17 it seeing it for the first time myself.

18 What we'll be doing tonight is we are going over
19 the proposed plan, offering the plan for the groundwater
20 remediation part of it. This is actually, I believe,
21 Phase 3 of it. And what we'll be doing is explaining what
22 the proposal is. And it's also in the fact sheet that's
23 on the table. So if you don't have one, please pick up
24 some of the information on your way out.

25 And also we'll be taking your questions. We'll

1 respond to the questions this evening, and then we will
2 make a definite break between questions and comments.

3 This is also a -- we're in a thirty day comment
4 period. When we get to the comment period tonight we will
5 not respond to them this evening. We'll take note of
6 them, and when the process is all over on the thirty day
7 comment period we'll write up something we call the
8 Responsiveness Summary. And that's where we will address
9 the comments. The questions will get responded to,
10 comments will not this evening.

11 If you do have questions and comments, because
12 we have a court reporter transcribing the proceedings this
13 evening, please state your name, and if it's an unusual
14 spelling, spell it for her, so that we can get it right in
15 the transcript. And we'd appreciate that. And then state
16 your comment and/or question, you know, so that she can
17 understand it. If she doesn't, she will probably ask you
18 if you could spell your name or something like that. So
19 it's for the transcription purposes.

20 The people that will be making presentations
21 this evening, of course, are Dion Novak, who is back here
22 talking with the reporters right now. He is the Project
23 Manager for EPA in Chicago. We also have Tony Likins,
24 from Indiana Department of Environmental Management. We
25 do work with the State on all the sites. And we have

1 Daniel Plomb, who is with CH2M Hill, our contractor who
2 works on the site with us.

3 And what Dion will do is he'll go through and
4 explain, like I say, what is contained in the fact sheet
5 and how the project is going right now. Tony will give us
6 the background information and the State's involvement in
7 the project.

8 I will be watching you when you come up to the
9 questions and answers, and I'll kind of keep them in turn.
10 So I'll be just off to the side. And these gentlemen have
11 the bulk of the presentation. So I'll be calling on you
12 and pointing to you to keep things going.

13 So I'm not going to talk anymore. We'll just
14 get on into the program. Like I say, Tony is going to
15 start out from the Indiana Department of Environmental
16 Management. He's the State Project Manager, and he's
17 going to give us a little bit of site history.

18 MR. LIKINS: I'll be discussing site history. Some
19 of you may already be familiar with it, but in case you're
20 not I'll try and reiterate things for you. Douglas Road
21 Landfill covers nearly nineteen acres of property located
22 northwest of the corner of Douglas Road and Grape Road, in
23 Mishawaka.

24 The landfill was operated by Uniroyal, Inc.,
25 from 1954 to 1979. From 1954 to 1971 solvents, fly ash,

1 paper, wood stock, rubber and plastic scrap were disposed
2 of in the landfill, which was not lined. In 1970 the
3 Indiana Stream Pollution Control Board advised Uniroyal to
4 discontinue dumping solvents in the land because a nearby
5 residential well was thought to be contaminated with
6 solvents. So from 1971 until 1979 only fly ash and some
7 scrap rubber was disposed of at the site.

8 Uniroyal ceased Landfill operations in 1979, and the
9 site was covered and seeded and officially closed in
10 December of 1980. Uniroyal then purchased the property in
11 1981.

12 In 1984 the U.S. Environmental Protection Agency
13 conducted a site inspection at the facility to see if the
14 landfill posed a threat to human health and the
15 environment. The inspection determined that potential
16 does exist for the site to have an adverse impact on the
17 surrounding community.

18 The site was proposed for
19 inclusion to the National Priorities List in 1986 and then
20 finalized in 1989. The National Priorities List, also
21 known as the NPL, is a roster of the nation's most serious
22 hazardous waste sites. Sites on the NPL are eligible for
23 investigation and cleanup using Federal Superfund moneys.

24 The State of Indiana and Uniroyal began
25 negotiations in April of 1989, and in September of 1989

1 the State and Uniroyal signed a consent decree in which
2 Uniroyal agreed to perform a remedial investigation and
3 feasibility study at the site. In November of 1991,
4 however, Uniroyal filed for bankruptcy, and in January of
5 1992 the Attorney General of Indiana was notified that
6 Uniroyal would not be fulfilling its obligations under the
7 consent decree.

8 In order to expedite further work at the site
9 using Federal Superfund moneys U.S. EPA and IDEM agreed in
10 July of 1992 that the U.S. EPA would be the lead agency in
11 all further work to go on at the site and the State would
12 then become the supporting agency for this work. So
13 currently the site is being worked on in three phases.

14 Phase 1 is the construction of city water line
15 extensions to those residences whose wells have been
16 affected or have the potential to be affected by the
17 contaminants emanating from the site. As you all know,
18 this construction is underway currently.

19 Phase 2 is the design and construction of a
20 landfill cap for the site. A Record of Decision for this
21 phase was signed in July of 1995, and that cap has been
22 designed and is now waiting to be implemented.

23 Phase 3 is remediation of affected groundwater
24 at the site, which we'll be talking about here tonight,
25 and Mr. Dion Novak will be presenting the proposed plan

1 for that remediation.

2 MR. DION NOVAK: Thank you, Tony.

3 My name is Dion Novak. I'm the project manager
4 from EPA for the Douglas Road site. I've seen some of you
5 here before. I see some new faces here tonight, which is
6 good. We're reaching more people. We try to reach as
7 many people as we can in the neighborhood, because this is
8 your neighborhood. We're coming down and explaining what
9 we feel is the best way to clean up the environmental
10 problems caused by the Uniroyal site, and it's good to see
11 new faces.

12 Couple points that Dave had asked me to make
13 about the fact sheet you all received. The estimated time
14 frames for each of the alternatives is the time frame to
15 construct the alternative, it's not the time frame to
16 clean up the groundwater. If we could clean up
17 groundwater in two or three months we'd all be Jesus.
18 The actual treatment times that we're talking about for
19 the groundwater remediation or cleanup is approximately
20 thirty years for the area down in the Douglas Road-State
21 Road #23 area. And we're talking about extraction and
22 treatment indefinitely at the site due to the high levels
23 of contamination that are present there.

24 All the alternatives that I'm going to be
25 describing here tonight that you see in your fact sheet

1 are explained in more detail in a Feasibility Study Report
2 that looks like this, (holds up a document), and it's at
3 the Mishawaka Public Library at the reference desk
4 downstairs.

5 Tony's already talked about the history of this
6 site, so I won't go over that. I just wanted to show you
7 where this site is. The site itself is located on Douglas
8 Road, just west of Grape Road, just west of the shopping
9 center that's at the corner of Grape and Douglas. We have
10 the University Park Apartment Complex immediately to the
11 east right next door. The site itself is this long
12 rectangle right in here (indicating), with these black
13 things, then over in this area is the self store
14 warehouse, the Bognar Nursery, and then going farther down
15 here is where State Road #23 comes in.

16 A summary of what we did. We started in spring
17 of 1994. Can everybody see these okay? We started in
18 1994 with a remedial investigation. What that is, it's a
19 study to determine the nature and extent of any
20 contamination present at the site. We have to go out
21 there and find out if there is any contamination there,
22 and if there is where it is and where it's going.

23 We collected a number of samples. We collected
24 geoprobe samples from twenty locations. What those are,
25 we take a machine and we just -- we push a pipe into the

1 ground to sample groundwater at a discreet location. What
2 we did there is we used those samples to help us locate
3 where to best place our monitoring wells to actually
4 monitor the aquaperk.

5 We collected groundwater samples from 22
6 monitoring locations. And that, again, is to determine
7 the characteristics of the aquaperk under the sites and in
8 the site area.

9 We collected approximately 70 residential well
10 samples. During the initial part of our investigation we
11 found contamination in a residential well along Douglas
12 Road. Using Ken Theisen, On-Scene Coordinator from EPA,
13 the emergency program in EPA -- can you stand up, please?
14 (Mr. Theisen stands up) Ken sampled approximately 70
15 homes so we could kind of get an idea where the
16 groundwater contamination was.

17 We collected 28 surficial soil samples at the
18 surface of the landfill itself to determine whether the
19 surface of the landfill was in fact contaminated and the
20 risks associated with contacting those soils. We did an
21 ecological survey which was to determine whether any of
22 the contamination present would have a deleterious impact
23 on ecology and wild life. We also did a human health risk
24 assessment, which is taking the levels of contamination
25 that we found at all of our samples and using EPA risk

1 management calculations and guidance calculating what the
2 hypothetical risk would be associated with contacting
3 those soils or the groundwater over a period of time.
4 Long term risks we calculate over a period of thirty
5 years.

6 What we found is -- and keep in mind, when we do
7 exercises such as this, a lot of this is artistic bent, I
8 guess, for want of a better term. We have all of these
9 dots here (indicating) that represent monitoring wells
10 that we discovered contamination at. And what we've done
11 in between here and there (indicating), since we don't
12 have any monitoring locations in there, is we've assumed
13 that the groundwater contamination problem extends down
14 towards this area (indicating). I heard a couple people
15 saying, "How do they know it's down in this area itself?"
16 We do know that this particular point right there was
17 contaminated (indicating). However, we know this is
18 contouring, so we're trying to project an artistic
19 impression what we feel the groundwater contamination
20 looks like. As you probably would figure out, up at the
21 top near the site itself where it's red, that's where the
22 high levels are, and that's where the site is.

23 This extends down -- State Road #23 extends
24 right in this area here (indicating). Douglas is down
25 here (indicating). And, as you can see, we got a plume

1 that we've identified contamination both up here as well
2 as down in this area (indicating), down in the
3 Elkins-McErlain-State Road #23 area.

4 As Tony mentioned, the cleanup was segregated
5 into three phases. The first phase we did because we
6 found contamination in peoples wells -- drinking water
7 wells. We did a -- that was the first phase, which we
8 expedited because of the fact people had contaminated
9 water to deal with the immediate risks. We discovered
10 contamination in approximately thirteen or fourteen wells
11 total out of the 75 or 80 that were sampled.

12 What we did for those people is we provided them
13 bottled water temporarily until we could figure out how
14 many people were impacted. Then once we figured that out
15 -- the main contaminants in the groundwater that we found
16 down under the residential area here (indicating) are
17 vinyl chloride and trichloroethylene, or TCE. What we did
18 in this area here (indicating) is we provided the people
19 that had impacted wells -- that had TCE contamination we
20 provided in-line filters for their faucet which would
21 effectively remove that contaminant. For the vinyl
22 chloride contamination we provided portable air strippers
23 which attached to their well, basically stripped the vinyl
24 chloride out of the water before it went into their tap.
25 We've done testing after that at those homes, and the

1 wells that were identified as being contaminated with --
2 once we put filters and the strippers in we didn't find
3 anything there. So those are in fact working. And we did
4 that as a temporary measure under the guidance of Ken
5 Theisen, from EPA, until we could get to this point where
6 we could hook up city water and go on to the next phases
7 of the cleanup. So these people down in this area
8 (indicating) are still on the air strippers and the
9 in-line filters until we can get done with the city water
10 hookup.

11 The second phase was the landfill cap. And
12 third phase is groundwater cleanup, which is why we're
13 here tonight.

14 Just a little bit more detail. The city water
15 hookup, which is Phase 1, started in early October, and
16 it's progressing very, very nicely thanks to the wonderful
17 weather that we've had here in the late fall. If
18 everything goes well, and that is a big if due to the fact
19 this is getting into bad weather season, we're hoping to
20 get all the connections done by the end of the year. We
21 are going to be hooking up, as Ken has told me, starting
22 to hook up people on the Cherokee Drive and Douglas Road
23 area starting next week, actually hooking them up so they
24 can get water, and then we're going to progress up State
25 Road #23 and then come down the other side. So again,

1 hopefully, in the next three or four weeks we'll have
2 everybody done. Then Phase 1 will be over except for the
3 well abandonment, which is a portion of that, and some of
4 the landscaping that needs to be done in the spring.

5 Phase 2, which is the landfill cap, that design
6 is completed. And we had a meeting last summer -- last
7 spring-summer where we said we were going to get it done
8 last fall. That didn't happen, as you probably were
9 aware, because our funding was pulled out from under us.
10 As you are also aware, our funding is currently in a state
11 of flux. So everything that we're planning on doing here
12 is dependent on getting the funding from Washington.

13 Phase 3, which is the groundwater cleanup, we
14 have this proposed plan which you all received or picked
15 up at the front table. The Record of Decision, which is
16 the final cleanup decision document for this particular
17 phase, will be completed this winter. The design of that
18 alternative will be completed by the spring of next year
19 and then, money willing, we will start the construction of
20 that alternative and be done with both that alternative as
21 well as the landfill cover alternative -- if we have the
22 money by the end of next year.

23 You probably notice that I keep saying, "If we
24 have the money." That is very much up in the air right
25 now. So we're doing what we can to get the project to a

1 point where once the money becomes available then we can
2 actually get out there and do something.

3 The remedy selection process that EPA uses -- we
4 are in this box right here (indicating). EPA selects the
5 preferred remedial alternative. That's what you see in
6 front of you. The support agency, which in this case is
7 Tony and Indiana Department of Environmental Management,
8 has commented on that plan. As you see, they support the
9 alternative that was recommended.

10 We go into the next bunch, which is public
11 comment on all alternatives, which is our meeting tonight,
12 as well as public comment period, which we are now in.
13 That ends on the 26th of December. Following that we have
14 a Record of Decision which, as I mentioned, is the final
15 cleanup plan. A component of that is a Response to
16 Comments, called a Response to Summary. And that's where
17 all the comments that are received, both oral tonight and
18 written during the comment period, are responded to and to
19 show how those factored into the final cleanup decision.
20 And, again, IDEM comments on that as well.

21 As you see in the fact sheet before you, the
22 alternatives that we considered for the groundwater
23 cleanup for the site were:

24 Alternative 1 - No Action. No action means do
25 nothing. We are required by law to do that as a base line

1 for looking at all the other alternatives. That
2 particular alternative, estimated time to implement two to
3 three weeks, a cost of \$950,000, which is mainly
4 associated with groundwater monitoring.

5 All of the alternatives that we're looking at
6 for the cleanup will include monitoring in this area down
7 here (indicating) because, as you know, we're going to
8 have all of these people hooked up to city water shortly.
9 These people down here (indicating) we are going to be
10 monitoring this area with any of the alternatives to make
11 sure that the conditions we discovered down there
12 (indicating) remain the same over time. If at any point
13 in the future we discover that contamination has migrated
14 down in this area (indicating) then we'll come back at
15 that time and address it. We did do sampling all through
16 here (indicating), and the reason you don't see any colors
17 here (indicating) is all these NDs mean non detect.
18 There wasn't any contamination in any of these areas.

19 Alternative 2 is Institutional Controls. And
20 those are restrictions where you place restrictions on
21 property deeds to restrict any type of subsurface
22 activities. We can put access limitations on properties,
23 we can put restrictions on wells -- the sinking of new
24 wells. Those are all institutional controls that we can
25 use to protect people from the groundwater contamination.

1 The time to implement that would be two to three months at
2 a cost of \$1.5 million.

3 The third alternative is Oxygen Enhancement with
4 Air Sparging for Near-site Plume. What that means is --
5 the near-site plume -- we're calling this area the
6 near-site plume and this area the off-site plume
7 (indicating). What that would do is we would install
8 wells up in this area here (indicating) and we would
9 inject air into the aquifer. And what that would do is
10 that would help to volatilize, or bubble out, the organic
11 contamination out of the groundwater. So that would
12 address the organic contamination in the groundwater up
13 here (indicating). That's not going to work down here
14 (indicating), because contamination down here is too deep
15 for that technology to work. That alternative is \$4.2
16 million and would take about two months to construct.

17 Alternative 4 - Groundwater Extraction and
18 Discharge to Mishawaka POTW, or public owned treatment
19 works. We would extract the groundwater from a series of
20 wells, both off-site as well as over near the site, and we
21 would pump that water directly to the Mishawaka treatment
22 plant for their treatment. It's estimated, based on the
23 levels that we found of contamination, that we would need
24 to pre-treat it before they got it. That alternative is
25 going to -- the timeframe for that is about three months,

1 and the cost is about \$13.3 million.

2 The fifth alternative is Groundwater Extraction
3 with Air Stripping and Discharge to Juday Creek. That's
4 similar to Alternative 3. What that does is the
5 groundwater is extracted and it's passed through an air
6 stripping tower where air is blown up through the water
7 again to help to volatilize, or bubble out, organic
8 contamination. Following the treatment of the water it
9 would then be piped to a discharge point on Juday Creek.
10 That alternative would take about three months to
11 construct and would run about \$6 million.

12 Alternative 6 -- Groundwater Extraction,
13 Constructed Wetland Treatment, and Discharge to Juday
14 Creek. The water would be extracted similar to
15 Alternative 5. It would be passed through a wetland for
16 treatment using natural attenuation processes, and
17 following that would be discharged to Juday Creek.

18 Keep in mind that all of the alternatives that
19 are using Juday Creek as a discharge point the State of
20 Indiana has developed and given to us numbers for
21 discharge that we have to meet in accordance with all
22 their NPDES permit discharge limits. They're contained in
23 the Feasibility Study in the library, and those are the
24 numbers that we would have to treat to in order to
25 discharge the water to Juday Creek, both to assure that it

1 wouldn't be harmful to humans as well as any creek life.
2 That alternative would take three to four months to
3 construct and will run about \$6.1 million.

4 And the final alternative, Groundwater
5 Extraction, Fluidized Carbon Bed Treatment, and Discharge
6 to Juday Creek for the Near-site Plume. Again this is
7 similar to Alternative 3 in that this would work for the
8 near-site plume, the area near the site, but not the
9 off-site due to the depth of contamination. What
10 fluidized carbon bed treatment is, is a combination of
11 biological treatment which uses bacterias to help break
12 down organic contamination as well as physical treatment
13 of that using (inaudible) carbon, again to help to polish
14 off the organic contamination. And then discharge to
15 Juday Creek would follow again all the NPDES numbers
16 established by IDEM, State of Indiana. That alternative
17 would take two to three months and cost about \$5 million.

18 Selecting of cleanup remedy. The nine criteria
19 -- EPA has developed nine criteria that we use to evaluate
20 alternatives that we're considering for cleanup of media
21 at a superfund site. The nine criteria I'm going to try
22 to explain to you. They're contained in the table in the
23 fact sheet that you got with all the boxes and the
24 triangles. That is where all of this is represented.

25 The threshold criteria, which are the first two

1 criteria that we use to analyze the alternatives, Overall
2 Protection of Human Health and Environment, that's self
3 explanatory. They all have to protect public health and
4 the environment, otherwise we can't consider them.
5 Compliance with ARARs, which is applicable or relevant and
6 appropriate requirements. And what those are, are federal
7 and state regulations -- standards -- groundwater
8 standards, air standards, things like that, all the
9 environmental regulations. That's what that particular
10 one means. All of the alternatives that we look at in
11 further detail have to meet these first two. They have to
12 protect human health and environment and they have to
13 comply with all the federal and state laws. Those are the
14 threshold criteria, the ones that have to be satisfied.

15 Following that we develop a list of alternatives
16 -- seven alternatives that you see in front of you, and we
17 have five categories that we call balancing criteria. And
18 the reason they're called balancing criteria is that we
19 use these criteria to balance the alternatives to see
20 which ones are better than others at various things.

21 Number 3, Long-term Effectiveness and
22 Permanence. It has to work over the long-term, it has to
23 be permanent. We can't fix something that's going to work
24 for a week and then stop working, because that's not going
25 to protect public health and the environment. So it's got

1 to do the work in the long-term, it's got to be effective
2 in the long-term.

3 Reduction of Toxicity, Mobility and/or Volume of
4 Contaminants. A lot of scientific words there, but
5 basically what that means is -- toxicity means how bad it
6 is. Mobility means how fast is it going to get from one
7 place to another? And the volume, obviously, is how much
8 there is of contamination there. The objective of
9 selecting alternatives for cleanup are to reduce the
10 toxicity or the strength of the contamination. Mobility
11 is how quick they can go somewhere -- or the volume.
12 That's the objective.

13 Number 5, which is Short-term Effectiveness, is
14 how effective is this going to be in the short-term? What
15 are short term risks associated with construction of the
16 alternative itself? How long is it going to take to
17 construct?

18 Implementability, Number 6, is how implementable
19 is it? Is it a standard remedy that we all know works?
20 Is it something that's innovative that we don't have a lot
21 of data to tell us whether it's going to work over the
22 long term?

23 And Cost. Obviously, how much is it going to
24 cost?

25 Those first seven criteria have been factored

1 into the fact sheet that you have, and those go into the
2 proposed plan.

3 Alternatives 8 and 9 are the modifying criteria,
4 and these criteria are used to modify proposed plan
5 alternatives. Number 8, State Acceptance. Does the State
6 of Indiana, this is their state -- do they accept what
7 we're proposing to do at the site? And, Number 9, the
8 Community Acceptance. Do you accept what we're doing out
9 here? Because obviously this is your community. These
10 are factored into the Record of Decision -- through the
11 public comment period they're factored into the Record of
12 Decision for the final cleanup plan.

13 This is a picture of -- a rough picture of the
14 selected remedy, which is Alternative 6, the Constructed
15 Wetlands and to Discharge to Juday Creek option. There is
16 a little bit better picture in the Feasability Study.
17 Figure 3 in Appendix C of the Feasability Study has a
18 little bit better picture -- schematic of what one
19 actually looks like, and I apologize for not getting that
20 onto an overhead.

21 The constructed wetland, what we would do is
22 construct a wetland. As I mentioned, we would pump the
23 groundwater out of the ground, put it into the wetland for
24 treatment, following treatment for a sufficient period of
25 time to meet the State of Indiana creek discharge numbers

1 then we would discharge it to Juday Creek through a
2 conveyance down from the site, or from wherever the
3 wetland is located, to Juday Creek. We're looking at a
4 total of about 830 gallons a minute of discharge. For
5 this alternative we're going to be extracting
6 approximately 830 gallons a minute.

7 Right now we're looking at three areas to
8 potentially put the wetland, and each of them have pros
9 and cons. The first area that we're looking at is this
10 area right next to the site here (indicating). The second
11 area that we're looking at is an area down on the State
12 Road #23 and Douglas Road area, and third place that we're
13 looking at is an area down here along Juday Creek
14 (indicating).

15 Constructed wetland treatment is, again, using
16 natural biological treatment processes, natural
17 attenuation. What the wetland does is it increases the
18 biological component of the contaminant degradation.
19 Contaminants if left in place over time continue to
20 degrade due to a number of processes in the subsurface.
21 What this will do, again, will increase the biological
22 component of the degradation. It will allow some of the
23 contamination to absorb onto the soils of the wetland
24 itself. What happens basically, as the water comes into
25 the wetland all the sediments, all the suspended solids,

1 all the dirt in the water is dropped into the bottom of
2 the wetland, and then the biological treatment again
3 absorbs onto the soils or, again, sometimes it volatilizes
4 into the air.

5 There's a couple of components of the wetland
6 itself. There's an emergent marsh area, which is where we
7 plant plants. This is just like a normal wetland where
8 it's just a marshy area, and the plants themselves are
9 used to increase and to help break the biological
10 breakdown of the contaminants. And then the other area is
11 an open water area where we have -- the marsh area is
12 approximately one to two feet deep, the open water area is
13 four to six feet deep, which helps to mix the contaminants
14 as they're treated.

15 Why did we select Alternative 6? We looked at
16 -- and the table that you see in the fact sheet -- we
17 looked at all of the alternatives, and we determined that
18 Alternatives 4, 5 and 6 were all basically in the same
19 ballpark as far as satisfying all of the criteria. The
20 air stripping alternative dropped out a little bit because
21 it didn't treat some of the organic contamination as well
22 as the other two alternatives, primarily the THF, or
23 tetrahydrofuran, contamination that we found near the
24 site. Alternatives 4 and 6 have complete -- more complete
25 organic contamination removal than Alternative 5 due to

1 that fact. Alternative 6 is significantly cheaper than
2 Alternative 4, \$13,3 million versus \$6 million.

3 Some of the things that we're looking at -- our
4 next stage after we get into the final cleanup decision is
5 the design of the alternative itself. Some of the things
6 that we're looking at -- some of the details that we're
7 looking at which could help -- we understand that there
8 are concerns about discharging this volume of water in
9 Juday Creek, and we will work with the local organizations
10 in order to minimize the impact that our actions will
11 have. And some of the -- a couple of the ideas that we
12 had, which we will be investigating further, in the design
13 of this would be potentially putting the wetland in this
14 area down here along the creek (indicating). And what
15 that's going to do is that's going to help us, because
16 it's going to give us an area to send our water to be
17 treated. I think it's also going to help some of the
18 problems with Juday Creek. And, again, this is something
19 we need to look into further. This could be designed as
20 kind of a holding area, which would help with the
21 sedimentation problems in the creek itself as well as
22 allow us to regulate temperature. That's the first thing
23 that we will be looking at.

24 The second alternative that we're looking at is
25 potentially putting the wetland up in this area

1 (indicating) and designing it such that a good portion of
2 it is just going to be like a bathtub where we're going to
3 have water in there and plant life which is going to be
4 treating contamination. And then we would design a
5 portion of that to act as an infiltration gallery, or an
6 area where the water could go back down into the
7 groundwater to the extraction wells and kind of help us to
8 circulate the water and treat it over time in that way.
9 What that would do is that would significantly decrease
10 the amount of water that we have to discharge in Juday
11 Creek. We're looking at -- for an ideal like that, that
12 -- again, we need to flush out a little further -- we're
13 looking about ten or fifteen percent of that 830 gallons
14 per minute that we're estimating is filtered stuff. So
15 that's another option that we can look at in the design.
16 And we will be obviously open to input from all the local
17 groups in the design of this as we progress.

18 What this also will do -- we selected this again
19 in conjunction with the second phase, which was the
20 covering -- the cap of the landfill itself. What this is
21 going to do is -- a component of the cap is you have to
22 put something on top, you have to put soil on the top --
23 native soil. And in the proposed plan that we did last
24 year we estimated we would have to truck in anywhere from
25 sixteen to twenty thousand trucks of dirt to put over

1 this, which would increase truck traffic and all of that.
2 What this would do is this would give us an area to dig
3 dirt out and put it on top of the landfill as the cover,
4 this area that the soil's unimpacted, which we would test
5 for. And then we'd test this -- we're digging a hole,
6 we're putting the stuff on top of here (indicating), which
7 would help save us money on this phase and it's also going
8 to allow us to do this as well. That's going to
9 significantly cut down on the truck traffic that would be
10 necessary to bring in the cover materials. The time to
11 implement would be shorter, obviously, because we're not
12 trucking it from wherever we were going to get the dirt
13 from. We would be coming from basically right next door.
14 What this would do is -- we believe it would increase the
15 natural wildlife habitat in the area, because this would
16 be an attractive place for wildlife to gather.

17 And again we stress that we are going to -- as
18 we go through the process work with the local groups. We
19 had several meetings, and we will continue to do that, to
20 try to work towards the best solution here. So again I
21 urge you to read the -- to go to the library and look at
22 the details of the Feasibility Study as they're presented
23 in front of you before you make your comments on our
24 proposal.

25 The next step, the public comment period, ends

1 on December 26th. We are in the comment period right now.
2 The Response and the Summary is an official appendix to
3 the Record of Decision, and that's all the substantive
4 comments we get. We have to say, "Here's the comment we
5 got, here's how we're addressing it in final cleanup."
6 The Record of Decision, as I mentioned, is the final
7 cleanup plan for this phase, and that's going to be
8 completed this winter. The remedial design, which will
9 happen winter-spring, again is where we go through and do
10 a lot of the things I just mentioned. And remedial
11 action, or the construction, money willing, will happen
12 next summer-fall. It's my hope that we have the money to
13 do this that we'll be done with everything by end of next
14 year.

15 That's it. Thank you.

16 MR. DAVE NOVAK: We'll go into questions now, like I
17 said earlier. We'll take the questions and we'll respond
18 to the questions. Once we feel that we've got all the
19 bulk of the questions done then we'll go into the
20 comments, which we won't address.

21 Sir.

22 MR. McNAMARA: My name is John McNamara. I'm the
23 County Surveyor of St. Joe County. I have a question and
24 then some comments.

25 Does Alternate 6 require permission from the

1 Drainage Board to drain into the creek?

2 MR. DION NOVAK: That, I don't know. That's one of
3 the things we will determine. And if we need permission,
4 we will get it.

5 MR. McNAMARA: The Drainage Board and St. Joe River
6 Basin Commission and Macog have spent a lot of time and a
7 lot of money on Juday Creek. We have come up with a
8 management plan. We are in the process -- the Drainage
9 Board is in the process now of retrofitting a bunch of
10 storm sewers that drain into the creek with these
11 wetlands. So we are familiar with the wetlands you're
12 talking about. I personally believe they work.

13 We're also doing a lot of work on erosion
14 control. In all of the studies we had done on Juday Creek
15 one of the problems is the volume of water that's getting
16 into the creek. The plan -- your Alternate 6 requires
17 about a million gallons a day to be put into the creek.
18 Now you say that perhaps if the wetland is placed up on
19 the north end and the water is recycled that perhaps that
20 can be cut down to about 10%, which is about 100,000
21 gallons. The problem I have with that is the plan calls
22 for a million gallons a day. If we buy Alternate 6 that's
23 what we're buying, we're not buying your projection that
24 perhaps we could reduce it down to 10%. That's a problem
25 I have with it.

1 One of the statements that I will make now, and
2 I'll probably -- I don't see any changing of my mind. I
3 am the technical engineering surveying expert to the
4 Drainage Board. The Drainage Board under no circumstances
5 will allow one million gallons a day to be drained into
6 the creek. You know -- so what I'm, I guess, suggesting
7 today, then, is we look at Alternate 4 which then puts it
8 into the City of Mishawaka. That's all I have.

9 MR. DION NOVAK: Do you want that to be an official
10 comment that has to be responded to?

11 MR. McNAMARA: Yes. The first one was a question,
12 and nobody had the answer, so the second one was just a
13 long comment.

14 MR. DION NOVAK: Okay.

15 MR. DAVE NOVAK: Sir.

16 MR. NORTON: My name is John Norton. I'm on the
17 Board for Juday Creek Association. I have two questions.

18 One, I have not heard the Department of Natural
19 Resources mentioned in your speeches. And with regards to
20 them, has this proposal been run past them, and what is
21 their comment? And second thing is, with the Alternative
22 4, is Mishawaka in agreement with this? Have they been
23 contacted? And what is their position on this?

24 MR. DION NOVAK: Well, let me answer the
25 second question first then Tony will take the first one.

1 Yes, the city of Mishawaka was contacted, and
2 they have agreed through the process to take -- they've
3 given us an estimate of what they would charge us to take
4 the water.

5 MR. NORTON: That's included in the \$13 million?

6 MR. DION NOVAK: Yes.

7 MR. LIKINS: As far as the Indiana Department of
8 Natural Resources, I contacted them in September, and
9 they've seen a copy of the Feasibility Study and had it
10 for about two months to review and comment. As of this
11 time they have not given me any feedback on it one way or
12 another. So I would hope that to mean that they don't
13 have any severe problems with it, but I can't answer 100%
14 to their stand on this.

15 MR. DAVE NOVAK: We'll get the question with the lady
16 in the back, then we'll get to you.

17 MS. ROSHECK: I'm Judy Rosheck. I'm a member of the
18 Friends of Juday Creek. R-O-S-H-E-C-K. I'm a member of
19 the Board of the Friends of Juday Creek, and I've seen
20 many drawings of the wetland, that type of thing. But I'm
21 wondering if it's ever been proven that an artificial
22 wetland can carry the volume of water that you're talking
23 about. I'm not a scientist, but it doesn't seem feasible
24 to me that you would be able to establish any kind of
25 growth of plants or anything like that when you got that

1 much water going into an area without having it just be
2 water and no plants to filter.

3 MR. PLOMB: We have a wetlands engineer that looked
4 at this and actually designed this portion of the
5 alternative, and he has done many of these for similar
6 situations involving solid waste and industrial waste
7 landfills where the leachate comes off.

8 MS. ROSHECK: When you have that much volume
9 going in twenty-four hours a day for thirty years?

10 MR. PLOMB: Yes.

11 MS. ROSHECK: And this has been in existence and
12 there's someplace we can go look at them?

13 MR. PLOMB: Yes.

14 MS. ROSHECK: Where?

15 MR. PLOMB: There's actually a site in Michigan -- in
16 southern Michigan, and there's actually another site in
17 Illinois.

18 MS. ROSHECK: Would you get us the addresses or the
19 places where we could look at them, please?

20 MR. DION NOVAK: Please contact me, and then we will
21 get those locations for you -- definitely.

22 MR. DAVE NOVAK: The gentleman in the blue shirt.

23 MR. DAVIS: My name is Dick Davis. I'm with the
24 Friends of Juday Creek Association, and my question to the
25 IDEM man up there is, would you -- or have you contacted a

1 DNR man by name of Keith Poole (phonetic). Keith Poole
2 (phonetic) has been assigned by DNR, he's in the Water
3 Department. He's been assigned by them to pass and
4 approve or object to any project that is involved with
5 Juday Creek. And if you just contacted the DNR, unless
6 you reach down to the proper person you're not really
7 going to get the right attitude about the thing.

8 MR. LIKINS: I did not contact that gentleman
9 personally, no. What I did was contact Mr. Steven Jose,
10 of the Department of Natural Resources.

11 MR. DAVIS: Steve who?

12 MR. LIKINS: Steven Jose. And he is our contact
13 person in the Department of Natural Resources. He is the
14 person we at IDEM Superfund contact when we have any
15 questions regarding the Department of Natural Resources
16 and he routes things accordingly to who needs to see them.
17 So I honestly cannot tell you who has or has not looked at
18 the Feasibility Study for Juday Creek.

19 MR. DAVIS: I'll contact Mr. Poole myself and
20 see if he's been contacted about that topic.

21 MR. DION NOVAK: And we can do the same thing as well
22 and make sure he has a copy of this so he can look at
23 both.

24 MR. DAVIS: Normally anything comes up at Juday Creek
25 he calls me. And and so we have a good rapport as far as

1 passing back and forth information. So I'll contact him
2 now and find out whether he knows anything about it. If
3 he knew about it he'd be in contact with me, I think.

4 MR. DION NOVAK: We will call him tomorrow or
5 Thursday and make sure that he gets a copy of this.

6 MR. DAVIS: I'll call him tomorrow probably.

7 MR. DION NOVAK: And then he's welcome to comment on
8 this as well.

9 MR. DAVE NOVAK: Sir.

10 MR. SPORLEDER: My name is J. C. Sporleder. I'm a
11 representative of the Izaak Walton League and Michiana
12 Watershed. Both groups have grave concerns about any
13 proposal to discharge more water into Juday Creek. The
14 creek is under stress now and doesn't need any extra water
15 volume or contaminants.

16 I have two questions. The first is, is there
17 any -- the cost for the wetland option, does it include
18 remediation at some time in the future? My understanding
19 is there could be some accumulation of contaminants over a
20 thirty year period, and logically it would seem sometime
21 that itself might be a problem.

22 MR. DION NOVAK: There will be monitoring done for
23 any of these alternatives over time to make sure that what
24 they're doing -- they're doing what they're supposed to be
25 doing, as well as any condition such as any accumulated

1 contamination or sediments. These will be monitored over
2 time. The wetland itself is designed, and can be
3 designed, to be dredged from time to time.

4 MR. SPORLEDER: Is that cost included?

5 MR. DION NOVAK: As sediments collect in the wetland
6 itself as fill in the wetland we come in from time to time
7 to take them out so we continue to have the same volume.
8 And they're landfill, that part.

9 MR. SPORLEDER: The second question is, it seems like
10 the alternatives that are proposed here are missing
11 perhaps one which would not involve discharge to either
12 the city sewer or to the creek, and that would be a closed
13 loop system, capturing it, and whatever treatment you use
14 then putting it back perhaps towards the highest
15 contaminants, keeping it on site and not spreading it off
16 to somebody else.

17 MR. LIKINS: Having a closed loop system would be
18 great, but there really is no such thing in real life.
19 And that's one of the things that Dion mentioned earlier,
20 where we would be creating eighty to ninety percent of the
21 volume. To be able to contain contamination coming from
22 the landfill we would have to remove in that amount of ten
23 or twenty percent.

24 MR. DION NOVAK: You may have to reduce your volume.
25 That is standard technology. Perhaps you should talk to

1 Mr. Ken Theisen here. He could perhaps give you some
2 examples in your area where large groundwater
3 contamination is being remediated and pumped back up to
4 the contaminant source and put through a recharge gallery
5 and not being dumped into a river or stream.

6 MR. PLOMB: It's not possible to both recharge 100%
7 of the water and contain the extra contamination coming
8 from landfill.

9 MR. SPORLEDER: To set up capture wells and pump into
10 a treatment system and recharge it?

11 MR. PLOMB: That's possible. But what I'm saying is
12 after you recharge it, it's still got to be contained.
13 And to be able to contain that you're not going to get
14 100% capture by recirculating 100% of the water.

15 MR. DION NOVAK: We'll make that something we can
16 work towards.

17 MR. PLOMB: We don't have an exact number on how
18 much we would have to waste or dump into Juday Creek.

19 MR. SPORLEDER: I would say that -- as a comment,
20 that it does seem like that alternative has been put down
21 as an alternative is missing from consideration should be
22 considered.

23 MR. DION NOVAK: That alternative was looked at in
24 the early chapters of the Feasibility Study. We look at
25 a whole host of alternatives and then we narrow them down

1 to the ones that we feel work the best. And the reasons
2 that alternative was screened out were the high cost
3 associated with treating the water in order to meet the
4 recharge criteria from the State of Indiana as well as the
5 zone of treatment of being sufficient enough to allow us
6 to get the treatment so that the system would work rather
7 than just recirculating the same water over and over. We
8 have a very narrow band -- a narrow treatment zone at the
9 site, because the site itself is fairly thin, so that we
10 have to have a sufficient treatment zone in order to do
11 something like that. So pumping the amount of water,
12 treating the water to meet the levels from the State of
13 Indiana, and to put it back into the ground --

14 MR. SPORLEDER: It's got to be cleaner than it was
15 is when it came out.

16 MR. DION NOVAK: Again, we -- a lot of the reasons
17 why it was ruled out -- it was screened out in early
18 phases is because of the fact we didn't have enough time
19 to get the contaminant treatment down to levels that we
20 could effect treatment over time. But, as Dan was
21 mentioning, and as I mentioned before, one of the things
22 that we were looking at for the wetlands alternative was
23 to recirculate a good portion of that water -- discharging
24 a small percentage to Juday Creek and recirculating the
25 rest of it. So we could effect that treatment much in the

1 same way as Dan's just described about treatment and
2 recirculation.

3 MR. DAVE NOVAK: Two things to remember in this
4 process: That any alternative that is chosen in the final
5 remedy it is readjusted and reassessed as it goes along.
6 And if it's not working for some strange reason then
7 alterations are made in that. And the other, that just
8 because we come up and we say, "We would like number six,"
9 it is not a done deal until after the comment period and
10 we get everybody's comments in. So it's still an
11 assessment process on our part also. So if we find that
12 some of the justification in the comments and everything
13 do effect that, of course we're going to consider that.
14 So up until that comment period is finished it's not a
15 done deal.

16 MR. DION NOVAK: And also, just to add to that, keep
17 in mind that when you're buying off on an alternative,
18 when you're commenting on an alternative, Alternative 6 or
19 any of the alternatives, the feasibility study is a
20 process that we use to evaluate the alternatives that we
21 feel are going to do the job. Following the Record of
22 Decision you're buying off on an alternative. Following
23 the -- if you buy off on Alternative 6, let's say, which
24 is the one we're recommending, the amount of water that
25 we're talking about for treatment in the constructed

1 wetlands, during the design process is when we actually do
2 the dirty work as to exactly how it needs to be
3 constructed, how it's best going to work. And those
4 numbers can change. As I was mentioning, because of the
5 concerns about Juday Creek we looked at alternatives such
6 as this which we feel could minimize the amount of water
7 going into Juday Creek. So as you consider these
8 alternatives, and as you formulate your comments on them,
9 keep in mind that the stuff that's in the Feasibility
10 Study is what we know at present. As we go further along
11 and we flush out the details some of those numbers, 830
12 gallons a minute, can change. And, as I mentioned, we're
13 looking at ways to do that so we can minimize impact to
14 Judy Creek.

15 MR. McNAMARA: Just to follow up on that statement,
16 if at the end of the comment period Alternate 6 is chosen
17 we're pretty well -- if Alternate 6 is chosen we're pretty
18 well locked into a million gallons a day. Now, you can
19 design it -- you can get down to your nuts and bolts and
20 we find out it's not going to be exactly a million, but by
21 buying Alternate 6 that's what we bought. That's the only
22 thing that bothers me. Where along the line -- you know,
23 any time after the first of the year if, let's say, you've
24 explored all the different design factors in Alternate 6
25 and it still ends up being a million gallons a day, that's

1 what we bought.

2 MR. DION NOVAK: Keep in mind that -- you're right.

3 MR. McNAMARA: That's the straightest answer I've
4 gotten out of the government in a long time.

5 MR. DION NOVAK: That is the amount of water that
6 we're looking at treating. As we go through the design
7 we can figure out once we're done treating where is it
8 going to go.

9 MR. DAVE NOVAK: The lady in the green.

10 MS. MILLER: My name is Sandra Miller, and I'm a
11 home owner along Juday Creek, and I'm absolutely opposed
12 to putting any more water in the creek. But my question
13 is, first of all, are you familiar with the Amoco site and
14 the type of remediation that is being done there? This is
15 in Granger. Because I remember specifically at one time
16 they were talking of putting water in Juday Creek and that
17 was discarded as an option. So I would be interested in
18 knowing what are they doing on that site, which is
19 gasoline related solvents? Are you familiar with that
20 site?

21 MR. LIKINS: I'm familiar with the site, but I have
22 no idea how that's being worked out.

23 MS. MILLER: I would think that would be worth
24 looking into, because I do remember that it was public
25 comment and reaction to the idea of putting the water from

1 the remediation of that site into the creek that made them
2 change their plans as to how they would do that. And I
3 think you need to know what they're doing instead.

4 MR. DION NOVAK: I would encourage you to make that
5 comment a formal comment that we need to respond to. And
6 if you want to do that, then we can do that.

7 MR. DAVE NOVAK: The gentleman in the green.

8 MR. NORTON: I would like to know if Juday Creek was
9 not available what would be your first alternative?

10 MR. DION NOVAK: We would have a situation in this
11 area where we would look at the alternatives of recharge
12 to the aquifer or discharge either to the Mishawaka POTW
13 or South Bend POTW. Those would be our options.

14 MR. NORTON: You made a comment earlier that
15 Mishawaka being -- Ball Band being bankrupt, et cetera. I
16 get in there probably once a month. There's a lot of
17 product being pushed out of that building. For being
18 bankrupt, they're going real well. Have they been
19 approached about any responsibility in this at all?

20 MR. DION NOVAK: You know, they filed for bankruptcy
21 about four or five years ago. All of the different
22 Uniroyal entities -- and I'm going to try to explain this
23 as best I can -- all the various Uniroyal entities settled
24 with the Federal government. They paid a sum of money up
25 front to cover all the past fines. Then what they did is

1 through the reorganization process they gave the Federal
2 government 360,000 shares of Uniroyal stock for this
3 particular site, which is still being publicly traded,
4 which the U. S. Treasury Department is going to sell at
5 some point in time. That money is going to be earmarked
6 for a special fund for this site -- cleanup for this site.
7 As far as can they be -- under the terms of the bankruptcy
8 law that's how they settled their liabilities. So in fact
9 we can't go after them other than getting those shares of
10 stock and selling them and taking that money and using it
11 for what we're doing.

12 MR. DAVE NOVAK: The gentleman in the back.

13 MR. WALTERS: My name is Mike Walters. I'm a home
14 owner in the area.

15 Have you been in contact with IDOT on the five
16 lane structure that they're going to do on State Road #23?
17 In '91 the original blueprints came out for that road, and
18 all the overflow was going to go into Juday Creek. Now
19 they've redesigned the road again and the retention ponds
20 for drainage and I still see they're going to put some of
21 the overflow into Juday Creek. Now, with this million
22 gallons of water per day plus the overflow from the five
23 lane road, being that's the lowest point on the road
24 structure will Juday Creek be able to handle all that
25 water flowing into it?

1 MR. DION NOVAK: I want Ken to address how our --
2 what they're doing, how we coordinate with what they're
3 doing.

4 MR. THEISEN: My name is Ken Theisen. I'm EPA's
5 on-scene coordinator for the construction of a water main.

6 The plans on widening State Route #23 include
7 storm sewers, and those storm sewers are going to be
8 handled via dry wells. There's numerous very large dry
9 wells going along both east, south, and west side of State
10 Route #23. So that's how IDOT is planning to handle the
11 runoff from State Route #23.

12 MR. WALTERS: That plan has been changed and there's
13 no dry wells going in.

14 MR. THEISEN: The drawings we have, and I have to say
15 they are 70% designed to completion -- in other words,
16 they were only 70% done when we got them, show dry wells.
17 So to the best of my knowledge -- unless that's been
18 changed since this last summer.

19 MR. DION NOVAK: When you see the water lines going
20 in along State Road #23 and Douglas Road where they're
21 putting water lines in are at the edge of the right-of-way
22 for that extention -- the widening of State Road #23. So
23 we coordinated with them to make sure that they wouldn't
24 rip up our water lines when they were doing what they're
25 doing.

1 MR. DAVE NOVAK: The gentleman.

2 MR. COUSSENS: What type of cap are you going to --

3 MR. DAVE NOVAK: You have to give your name.

4 MR. COUSSENS: My name is Frank Coussens. We're
5 land holders in this area.

6 What type of -- are you going to put some kind
7 of a barrier that water doesn't get on top and continue to
8 seep down in there and then put fill dirt on top of it, or
9 are you just going to put some fill dirt in there?

10 MR. DION NOVAK: No, no, no. I encourage you to go
11 to the library and read our decision for that. What we're
12 going to be putting on top of the landfill itself is a
13 multi-layer cover with impermeable membrane -- several
14 membrane liners to be placed over the fill itself, with
15 fill dirt on top of that to support some vegetation. So
16 the idea is to keep rain water from seeping down into dirt
17 at the site.

18 MR. COUSSENS: How big of wetlands per acre size
19 are you thinking of putting in?

20 MR. PLOMB: About fourteen or fifteen acres.

21 MR. COUSSENS: The only site -- the site that
22 you had mentioned, which is on the straight south, there's
23 about five or six acres in there total only. On the
24 Douglas Road site there, just about where that green
25 starts down through there, there was about ten or fifteen

1 acres filled in there about -- right there in the south --
2 that one time was essentially total wetlands outside of
3 right up close to Douglas Road, and about ten, eleven,
4 twelve years ago they took and filled that in. They used
5 the part of it I thought would have been contaminated soil
6 to come out where East Race in South Bend is. But that
7 was all wetlands in there. And that twenty-five acres in
8 fact is for sale right now. And if you were going to
9 build wetlands I would suggest that you -- anyplace that
10 you in fact would almost take the twenty-five acres, and
11 that way a whole lot of it -- you would put a whole lot
12 less water into Juday Creek. Now they're talking, you
13 know, roughly 1,000 gallons a minute or something. But we
14 have discharges right here in this Grape Road area off of
15 parking lots that last -- when we had some big rains
16 probably were discharging 10,000 gallons per minute. And
17 this is not off a road, these are off of parking lots.
18 And they were approved by IDEM and so forth. And this is
19 where we're seeing all the erosion. About ten, fifteen
20 days a year Juday Creek is what they call up, and -- but
21 the problems with those situations are they discharge the
22 runoff from the parking lots into the creek at very, very
23 high levels. And this is what's causing our problems with
24 our -- essentially with our creek. And I just -- maybe a
25 month ago I spent four days at the American Rivers

1 Conference and so forth, and this is in general -- now the
2 State of Michigan was wanting all kinds of waters and
3 sewers and so forth. Now they're having all kinds of
4 conferences, the fact that they're polluting their rivers
5 with the runoffs and sewers, and now they have big
6 questions of the fish dying off in Lake Michigan and the
7 salmon and so forth. And there are many advocates of
8 sewers where essentially in sandy soils and so forth, like
9 in homes, I understand the factories and things like that,
10 you really do need them. But are they in fact running a
11 whole bunch more stuff down these sewer systems and both
12 eroding the rivers away, depositing the silt? Because
13 eventually, ten years or fifty years or 200 years, all
14 that silt and everything is going to be out in Lake
15 Michigan, including all the contaminants. So -- but I do
16 think if you built a big enough wetlands over there, that
17 twenty-five acres, which is on the market, would be an
18 excellent place to build that wetlands. This way I think
19 the discharge -- if you were going to discharge anything
20 into Juday Creek, okay, I think it probably would be in
21 the matter of several hundred gallons rather than roughly
22 1,000 gallons.

23 MR. DION NOVAK: Thank you. That's one of the things
24 that we can look at during the design of this.

25 MR. COUSSENS: We've lived here all our life. We

1 know about floods. We see all kinds of stuff being dumped
2 in that creek with permits absolutely ruined -- the creek
3 is probably four to six foot wider than it was fifteen
4 years ago.

5 MR. DION NOVAK: Our intent -- we will take that --
6 thank you for that. We will take that comment. Our
7 intent when we're done here is to make sure that we don't
8 make it any worse by doing what we're doing.

9 MR. COUSSENS: I'm just saying if you were to think
10 of a wetlands option, okay, and I have no problems of
11 having the wetland options, but the discharge goes into
12 the City sewer of Mishawaka which is down Douglas Road
13 already.

14 MR. DION NOVAK: And that's something we can
15 consider. And I would encourage you to make that a formal
16 comment.

17 MR. COUSSENS: I would think you could design it in
18 such a way that they could overflow, okay, would go back
19 into the City of Mishawaka.

20 MR. DION NOVAK: One of the things -- Dave just
21 responded to that a little bit. One of the reasons why
22 the Alternative 4 cost \$13.3 million is because of a large
23 surcharge that the City of Mishawaka is placing on this
24 discharge to do that. How that would impact the smaller
25 discharge we don't know, but we can look into that.

1 MR. DAVE NOVAK: We go to the gentleman in blue, the
2 lady in green, and then the gentleman in green.

3 MR. DAVIS: In reference to what Miss Miller
4 mentioned a while ago about the Amoco cleanup site, I
5 happened to be in correspondence with IDEM about five
6 years ago when the proposal was to aerate the water and
7 then run the discharge after aeration into Juday Creek.
8 And my comment at that time was objecting to it twofold.
9 Number one, volume of water, and, number two, raising the
10 temperature of the water. This is another problem we have
11 with the creek. It's on the ragged edge of not being able
12 to breed the trout. And we got not only the problem with
13 silting, we have a problem with temperature elevation. So
14 this is another thing we should consider.

15 And getting into what Miss Miller mentioned a
16 while ago, Amoco went a different route. I don't know how
17 they do it. But they turned them down on discharging
18 anything into Juday Creek because of the two things I
19 mentioned, volume and temperature. And they're solving
20 their problem some way. You'll have to find out. I don't
21 know how they do it. Apparently they're cleaning it up.
22 This was a gasoline spill.

23 MR. DION NOVAK: One of the things that -- or the
24 first thing, volume, we understand that. And one of the
25 things we're looking at is trying to decrease the amount

1 of water that we would be putting into Juday Creek. The
2 second thing is that -- one of the things we were
3 discussing, and we can evaluate further as we go along
4 further in the process, is taking the water out of the
5 ground and putting it through this wetland treatment
6 process and getting it to a temperature that's more
7 compatible with what's already in Juday Creek so that you
8 don't have the temperature shock from putting the actual
9 groundwater into the creek itself. That's something that
10 we could also do.

11 MR. DAVE NOVAK: Yes, ma'am.

12 MS. MILLER: Would you please walk me through the
13 three wetland areas that you showed us on the map and show
14 -- for instance, I believe that one of them was what I
15 call the trailer park pond. That certainly is not
16 fourteen or fifteen acres up there. You said one was #23.
17 There's not fourteen or fifteen acres in there. What was
18 the third one?

19 MR. DION NOVAK: The three that we were looking at
20 were this area to the west of the site up in here
21 (indicating). We do have sufficient land up in that area.
22 We do have land down in this area (indicating). And again
23 these are places that we're potentially looking at. They
24 may be ruled out because they're not big enough. But the
25 area we're looking at down in this area here (indicating),

1 and then third one is over in this area (indicating).

2 MS. MILLER: And you understand that the pond area
3 is a pond which the creek goes through and --

4 MR. DION NOVAK: Yes.

5 MS. MILLER: (continued) -- I don't know what other
6 land is much available.

7 MR. DION NOVAK: Yes. We understand that, yeah. And
8 that's one of the things that we will evaluate as we go on
9 through the process, to make sure that we do have
10 sufficient space for placement of it.

11 MR. DAVE NOVAK: Yes, sir.

12 MR. NORTON: With a comment going along with what
13 Frank had talked about earlier about the amount of
14 discharge from parking lots, hard rains, et cetera, I've
15 seen first hand what has happened. If you ended up with a
16 drainage into Juday Creek could it be designed in such a
17 way that it would be shut down during our flood seasons,
18 so to speak?

19 MR. DION NOVAK: It's possible. And what we can do
20 is we can design the wetland itself so that we can
21 regulate flow out of the downgrading. We put the water in
22 we can regulate the flow going out.

23 MR. DAVE NOVAK: Yes, sir.

24 MR. NORTON: A comment that just occurred to me is
25 that the USGS run a year long study of the flow rate into

1 Juday Creek, and it varies considerably from one period to
2 another, spring to fall to winter and so forth. That
3 would be another alternative. If you wind up, you know,
4 getting it in the creek whether we want it or not it
5 could be, I think, adjusted seasonally somehow or other to
6 maintain -- maybe, you know, cut it down in high flow
7 periods and bring it up in low flow periods.

8 MR. PLOMB: We did take a look at some of that flow
9 data, and basically the data indicated that you had an
10 average flow rate in the creek of about 25 CFS, cubic feet
11 per second. It also showed you have a low flow rate of
12 about 10 CFS and a high flow rate of about 80.

13 MR. COUSSENS: The high flow is 300-some in the
14 studies.

15 MR. PLOMB: I'm not talking about --

16 MR. COUSSENS: The average of the top 10% is about 39
17 cubic feet per second. Probably the average flow is about
18 29. The low flows range between 20 and 25.

19 MR. PLOMB: To put everything in perspective, the
20 amount of water we want to put into the creek is 2.

21 MR. COUSSENS: I understand that, and I'm just
22 telling you some of the discharges that we're dumping into
23 this creek.

24 MR. PLOMB: And I guess putting basically 10% --
25 adding 10% of the water to Juday Creek we don't feel would

1 be a problem. We feel the creek's problem stems mostly
2 from a lot of runoff it gets from things like developments
3 and parking lots that have high silt and solids moving.
4 And also the fact there's been so much paving going on
5 you're getting more flow through the creek during the
6 storms.

7 MR. DION NOVAK: But again, keeping in mind those
8 comments -- and I will reiterate again, we will work to
9 try to minimize the impact that we are having on what
10 we're doing on Juday Creek given all of those concerns.
11 Because we do understand that, and we will factor those
12 into our design of this particular alternative.

13 MR. DAVE NOVAK: Yes, sir.

14 MR. COUSSENS: I have to make a comment about the
15 flows into Juday Creek which have been falsely reported
16 by a number of engineers. Over the past few years you've
17 seen farmers going to what they call no till farming and
18 so forth. And twenty years ago if we got two inches of
19 rain this Juday Creek would be unbelievably muddy and so
20 forth. Now if you go off that Fir Road, which is just
21 over here about a mile or so forth, you get two inches of
22 rain rarely does the creek come up at that time. But the
23 next day or two, because the groundwater comes up in the
24 creek, then the flow is up. But you might get two inches
25 or three inches at Fir Road where if you just get by the

1 pond down here the creek is up three foot and more. And
2 so you're seeing less in storm conditions, you're seeing
3 less flow from farm runoffs than you were five or ten
4 years ago because of all the no till. And there's only
5 one farmer in this total area that plows anything.
6 Because you're getting some places as much as two million
7 nightcrawlers per acre, and that takes a tremendous amount
8 of water. But, secondly, in some of those conferences I
9 go to on these rivers and streams we are beginning to see
10 more violent storms essentially. When you used to talk
11 about the hundred year storms and so forth, here in some
12 places in northwest Indiana we've had where roughly five
13 inches would be hundred year storm some of those farmers
14 who are working with American Rivers and so forth are in
15 fact getting -- one farmer's had three storms above ten
16 inches in the past three years. In the summer he had one
17 of thirteen. So when everybody talks about what we're
18 going to do and this is a hundred year storm thing, it's
19 not applicable as it was twenty or fifty years ago when
20 they come up with these things. And this is why sometimes
21 you will see this Juday Creek sometimes -- we're going to
22 get ten inches of rain in here some day, or thirteen
23 inches of rain, and we are going to flood everybody out
24 from here to Roseland because what's happened here is not
25 because of the farm land upstream.

1 MR. DION NOVAK: I think that over time we are
2 revising our estimates. And this is far out of our realm,
3 but I think meteorologically we're revising a lot of our
4 estimates on the 100 or 250 or 500 year storms because of
5 the fact that we're getting much heavier rains now. So
6 that's something that as we get more information we revise
7 our estimates for that. But we are aware that we have
8 rain events such as that can significantly impact a creek
9 such as Juday Creek.

10 MR. COUSSENS: And it's becoming much more
11 prevalent throughout the country. I've seen some data on
12 some rivers that run up sixty-four times the normal flow.

13 MR. DAVE NOVAK: The lady in the back.

14 MS. SHOCK: I'm Wanda Shock. I'm a Board Member of
15 the Friends of Juday Creek. Just a comment here.

16 Given the fragile nature of the creek, given
17 that any kind of increased discharge it could take to
18 impact the creek, I think we all agree on that, and given
19 your comments that you don't want to negatively impact the
20 creek, constructed wetlands were going to be the
21 alternative and you were going to monitor and regulate and
22 measure, but also given the fragile nature of the EPA
23 budget, how can you absolutely guarantee us that the
24 monitoring, measuring and regulating will continue for the
25 next thirty years you won't just leave us with a big old

1 wetland?

2 MR. DION NOVAK: What happens is we come along, we
3 spend a lot of money and put it in. And then following
4 that, because of the fact that we don't have Uniroyal
5 around to take over that operation and maintenance period,
6 the State of Indiana is in charge of the operation and
7 maintenance long term of remedies that we do select.

8 MS. SHOCK: That's the DNR?

9 MR. DION NOVAK: That's IDEM. So once we're done
10 they --

11 MS. SHOCK: Now, given the fragile state, though, of
12 IDEM, you guys have had to fight for everything for the
13 last four years, I just want assurances that we're not
14 going to have some big hole in the ground, that you
15 promise us the world and all of a sudden we have maybe
16 fifteen acres of wetland not sufficient for this area and
17 you've left us high and dry and next week it's gone. So
18 what kind of assurances --

19 MR. DION NOVAK: All I can do is -- the budget stuff
20 is out of our realm, it's in the realm of your local
21 representatives in Congress.

22 MS. SHOCK: So if we had these alternatives with an
23 unguaranteed source of income for them that would have
24 to lay heavily in our decision, wouldn't it?

25 MR. DAVE NOVAK: We got Pat Carrasquero here from

1 IDEM also who can address that on their behalf.

2 MS. CARRASQUERO: In order to get this remedial
3 action to be constructed here Indiana has to sign a
4 contract with EPA which guarantees that we will provide
5 the operation and maintenance. The money that pays for
6 that operation and maintenance comes from the Indiana
7 Hazardous Responsive Trust Fund, which is a tax on
8 hazardous waste disposal. And so Indiana has -- in order
9 to get the remedy here at all Indiana has to sign a legal
10 agreement saying that we will maintain that money.
11 And so from that point on we have a legal obligation.

12 MS. SHOCK: And it's a Hazardous Trust Fund?

13 MS. CARRASQUERO: The Indiana Hazardous Responsive
14 Trust Fund is where we get the money to pay for operation
15 and maintenance of these areas.

16 MR. DION NOVAK: It's similar to the EPA Superfund,
17 which is where we're drawing from to do the work at this
18 site, because we don't have anybody to go after.

19 MS. SHOCK: But you ought to put it on hold for a
20 while until you got the money.

21 MR. DION NOVAK: That's true. The funding mechanisms
22 are out of our hands. The reason that we're doing what
23 we're doing is we want to prevent -- because we're
24 addressing the immediate area with the city water line we
25 want to make sure that we can take care of the groundwater

1 so that it doesn't migrate down beyond the bounds that we
2 currently envision it at so that it could become a problem
3 at some time in the future.

4 MS. SHOCK: And we appreciate what you're doing, and
5 we know it's not you guys. You've all worked for this
6 creek and for the people by living this creek. I'm just
7 afraid with this increased flow, increased erosion, we're
8 going to be living right in the middle of the creek if we
9 don't do something about this. Is there much more
10 increased wetlands other than fifteen acres? Ten percent
11 is really nothing when you're talking about a million
12 gallons a day. Can you expand the wetlands? Do you have
13 money for an expansion?

14 MR. PLOMB: What do you mean by 10% is really
15 nothing when you consider a million gallons?

16 MS. SHOCK: Well, if you're counting right now one
17 million, 100,000 gallons of discharge into the creek
18 is 10% of that.

19 MR. McNAMARA: No, no, no. He's going down from one
20 million down to 100,000. Ten percent. He's not reducing
21 it.

22 MR. DION NOVAK: Yes. Ten to twenty percent of
23 that, which would be 100 - 200,000.

24 MR. PLOMB: Which is -- putting it in perspective,
25 you wouldn't notice it on your hydrograph.

1 MR. DION NOVAK: Yes. But also keep in mind that
2 -- to answer your question, right now we have put in our
3 regional budget the moneys that we need to do this.
4 Whether we will get them, I don't know. A lot of that
5 depends on the budget that we get from Washington. EPA is
6 a whole, and the Superfund is a part of EPA. I have
7 requested the funding to do these projects. If I get it,
8 I don't know.

9 MS. SHOCK: Will it be before December 26th?

10 MR. DION NOVAK: No. You can read the newspapers
11 as well to see what they're doing in Washington. They're
12 talking about another continuing resolution with no deal
13 on the budget. So we don't know. We have no idea.

14 MR. DAVE NOVAK: The gentleman up here in the blue.
15 You had your hand up before.

16 MR. MICHAEL: Eric Michael. I just had a follow up
17 question to Wanda.

18 You said this past summer you were going to take
19 care of capping the landfill, and your contractors came
20 out and removed all the trees and all the vegetation from
21 the landfill and left the soils which have the dioxins and
22 PCBs exposed and no cover has ever been put on. And I was
23 wondering if you have any idea when the capping may be
24 done or when just an emergency lane of withdrawal or some
25 type of cap that would keep the soils in place would be

1 done?

2 MR. DION NOVAK: The stuff that's out there has grown
3 back very nicely, as you probably have noticed. Again,
4 that all relies on funding. I've requested the money to
5 do this. If I had the money it would have been done
6 already. I would have been sitting here saying, "I'm
7 done." But I don't, so -- I've requested it. And if we
8 get the sufficient budget that we need, then I will get
9 the money to do that. So it all relies on that. Will I
10 ever have the money? If it comes in then hopefully we can
11 get enough to do this. I can't tell you yes or no,
12 because I don't know.

13 MR. MICHAEL: I was out there in August, and it
14 hadn't come back in the central part of the landfill. But
15 are there emergency measures or emergency funds you can
16 use, like Emergency Response, to just lay a temporary type
17 of cover on there?

18 MR. DION NOVAK: Unfortunately, they're subject to
19 the same whims that we are. The city water line that
20 we're doing now we originally wanted to do in the spring,
21 but they pulled the funding out from us. We fought all
22 summer to get the kind of money to do it now. So we had
23 to fight for that as well. Our money is coming from one
24 source.

25 MR. DAVE NOVAK: Yes, sir.

1 MR. NORTON: John Norton. Another big group that
2 does a lot of studying and research along Juday Creek
3 and has a lot of input to what knowledge we know is Notre
4 Dame. Since they also are owners along the creek on both
5 sides have they been contacted about this? Do they know
6 of this proclamation?

7 MR. DION NOVAK: Dr. Silliman, from Notre Dame, was
8 at our meeting for the landfill cover last year and gave
9 us a lot of comments about the groundwater in the area
10 itself. He's on our mailing list. We sent all this stiff
11 out. He's not here tonight, so I don't know if he has
12 comments for us. I hope they do. But he did have
13 comments of this nature for us last year.

14 MR. NORTON: So they're aware of this?

15 MR. DION NOVAK: They're aware of what we're doing,
16 yes.

17 MR. NORTON: Was that Dr. Silliman.

18 MR. DION NOVAK: No, Dr. Steve Silliman.

19 MR. NORTON: There's another fellow, I'll be meeting
20 with him tomorrow, he's a biologist from Notre Dame that
21 they've done a lot of studies.

22 MR. DION NOVAK: Yes, Dr. Silliman's done a lot of
23 studies of the area itself.

24 MR. DAVE NOVAK: Important point. They mentioned a
25 mailing list. If you didn't sign this sign-in sheet when

1 you came in, please do so. That's our way of keeping up
2 to speed of who is on the mailing list and getting that
3 information back out to you. If you've moved since the
4 last time, if you didn't sign in please do so before you
5 leave this evening.

6 Any other questions or comments? We kind of got
7 them mixed up here today, which is alright.

8 QUESTION: How much land do we need to recharge
9 treated water back into the ground downgrading?

10 MR. PLOMB: We think we could handle the flow we're
11 considering in four or five acres.

12 QUESTION: So you know where you might have fourteen
13 acres up near the landfill for discharge from the wetlands
14 or for a wetland? Why couldn't you use -- why couldn't
15 you treat the water and discharge it as recharged water,
16 downgrade it from the landfill?

17 MR. PLOMB: That's one of the alternatives.

18 QUESTION: What can't you remove with treatment?
19 What types of contaminants can't you remove with
20 treatment?

21 MR. PLOMB: No treatment is 100% effective. So
22 whatever is in the groundwater now there will be residuals
23 of that that would be recharged into the groundwater
24 should that become an option.

25 MR. DION NOVAK: But under Alternative 6, as it's

1 currently proposed, what we would have is we would have --
2 if we were to -- say let's take this area up here
3 (indicating), we would have the wetland constructed up in
4 this area (indicating), we would have our extraction wells
5 downgrading of that that we would be collecting the
6 groundwater from, we would be taking the water from these
7 wells and pumping it back into the wetland for treatment,
8 and then it would be recharging into the aquifer, sinking
9 down into the ground and then coming back and being picked
10 up by these extraction wells again. So that's basically
11 how the process would work. We'd have our extraction
12 wells pumping groundwater from where the groundwater is
13 going, we would be pumping it from there and then
14 recirculating it back. So it wouldn't be getting any
15 further than our extraction wells.

16 QUESTION: But you couldn't just recharge that into
17 -- you couldn't recharge that downgrading of the landfill
18 without putting it into Juday Creek?

19 MR. DION NOVAK: Well, keep in mind that if we got
20 our wetland right here (indicating), and we got our
21 extraction wells here (indicating), and we're discharging
22 water down here (indicating), we're not collecting it
23 anymore. So that's why if we got the wetland here
24 (indicating), we got the wells here (indicating), and we
25 just discharge it back over here (indicating), we got kind

1 of a circle. But if we discharge down here (indicating)
2 we're not collecting it anymore and we're putting
3 contaminated groundwater back in the ground and it's going
4 to migrate further downgrade. And we don't want that.

5 QUESTION: What Amoco's doing out in Granger, they
6 have interceptor wells downgrading it where their plume
7 is, where interceptor wells capture contaminants, they air
8 strip and carbon treat it, pump it into -- well, pump it
9 into ponds -- infiltration ponds, and then they recapture
10 it. It's a circular process. Could you do the same thing
11 here with wells, downgrading it to where you would be
12 recharging it back?

13 MR. DION NOVAK: That's exactly what I just
14 described. We're going to have wells here (indicating),
15 we're going to have everything recharged over here
16 (indicating). So it's exactly --

17 QUESTION: But without discharging the water into
18 Juday Creek?

19 MR. PLOMB: It's not technically impossible to have a
20 completely closed system in a natural environment like
21 this. You're always going to have a little extra flow
22 coming in daily with regard to rain, current groundwater
23 that's flowing underneath the site. All this has to be
24 captured and then recharged back. So you've got to take a
25 net amount out of that system such that you can always

1 retain what you're recharging. It's not possible to pump
2 100 GPM, put it in an upgradient, and capture all that
3 plus whatever else is coming down at 100 GPM.

4 MR. DION NOVAK: But that extra small amount of
5 water we're going to have to do something with, and we
6 propose to discharge into Juday Creek.

7 MR. DAVE NOVAK: Gentleman here in front.

8 MR. WOODCOX: I'm Dave Woodcox. I'm superintendent
9 of the apartment complex next door. I can't see the chart
10 real well, but was there any testing done east of the site
11 other than that little one up north?

12 MR. DION NOVAK: No. Because the groundwater's
13 moving towards the south to west to southwest. We know
14 that from all the studies as well as from our study.
15 Actually water that we tested from up here (indicating),
16 there's nothing in it.

17 MR. WOODCOX: But the landfill site is two or three
18 feet higher than the site on our side.

19 MR. DION NOVAK: Uh-huh.

20 MR. WOODCOX: There's certainly some run off coming
21 off there.

22 MR. DION NOVAK: Well, that's possible that there's a
23 runoff itself, but the groundwater itself is moving in
24 this direction (indicating).

25 MR. WOODCOX: Another question. When you attach the

1 pumps to start pumping, if that ever takes place, how
2 many location sites, or is it going to tap into the well
3 sites that's already dug now?

4 MR. DION NOVAK: There's one well location that we
5 have on site that we've sampled that is sufficient for
6 groundwater extraction. We would put a number of other
7 ones in as well. And that would be part of how we design
8 the system, how many wells we would need to do what we
9 need to do.

10 MR. DAVE NOVAK: Yes, sir.

11 QUESTION: Along with what this gentleman said over
12 here about self contained on the property when you were
13 talking about the amount of water that would be added
14 through rains and water that you can't put back into the
15 ground, you could install evaporation towers to get rid of
16 a lot of water just by evaporation which would a permanent
17 on-site --

18 MR. PLOMB: Not during all portions of the year.
19 You might get rid of a large amount of water --

20 QUESTION: Eight months out of the year.

21 MR. PLOMB: I don't think you could even use it eight
22 months. Might get six months out of the year you would
23 take care of the extra water, but after that --

24 MR. DION NOVAK: That's an additional cost that we'd
25 have to factor in long term that we're looking at.

1 MR. DAVE NOVAK: Yes, sir.

2 MR. COUSSENS: I'd like to come up here and make a
3 comment. (Speaker goes to diagram)

4 If you would build the wetlands in this area
5 (indicating) and take this whole twenty-five or thirty
6 acres and build a wetland, and just have it so it would
7 discharge -- or whatever discharged, could you take and
8 then pump and -- make a site back up in here (indicating)
9 and pump the water back up in here (indicating)? What if
10 there's only maybe 100,000 gallons or much less than that,
11 or 50,000 gallons? Could you instead of pushing it down
12 the Mishawaka sewer system, or down Juday Creek -- could
13 you -- because this is probably fifteen foot above the
14 water level up in here (indicating), trying to construct
15 wetlands up in there (indicating) would be a real problem.

16 MR. DION NOVAK: Keep in mind as we're talking about
17 doing what you just described we're taking it from here
18 (indicating) -- we're taking it and pumping it and putting
19 it over here (indicating) and then we have no means to
20 collect it once you pump it into the ground here
21 (indicating), so it would tend to migrate down there.

22 MR. COUSSENS: Yes. But this would be treated water,
23 right?

24 MR. DION NOVAK: Correct. The process -- the levels
25 that we have mean that we're going to have to continue to

1 treat this water over time in order to get it down to safe
2 levels.

3 MR. COUSSENS: Then would it be smart to pump it out
4 in this area and just keep pumping it out, eventually
5 flushing it out?

6 MR. DION NOVAK: That's basically what we described,
7 yes.

8 MR. COUSSENS: I would just think if you could --
9 because I think trying to construct a wetlands area up in
10 here (indicating) -- since I own one of the couple ponds
11 in this whole area (indicating) I would just think that --
12 and it's about seventeen foot down, and it's not that far
13 from north side, trying to construct a wetlands in there
14 would be a real -- could be a real problem, I would think.

15 MR. PLOMB: It would.

16 MR. DION NOVAK: Keep in mind the wetland is going to
17 have a liner around the bottom. I apologize for not
18 mentioning that.

19 MR. COUSSENS: That makes a difference.

20 MR. DAVE NOVAK: Any other questions or comments?

21 MS. ROSHECK: Judy Rosheck. I hate to be a Doubting
22 Thomas but -- first of all, and I know government
23 funds, you know, you are limited, and there are some days
24 they're there and some days they're not. And I'm
25 wondering if you haven't rushed to some alternatives and

1 not investigated everything that you could have
2 investigated. You were very definite about the
3 groundwater coming down southwest, and yet you've got the
4 contaminated plume that's northwest which you didn't take
5 into consideration. And I guess my question is, do you
6 really feel that you have investigated what the man from
7 the St. Joseph River Basins talked about when you're
8 recycling into the same -- rather than taking the water
9 out of -- pumping contaminated soil and water out of a
10 site and moving it over into another site? I'm just
11 wondering if thirty years down the road you're not going
12 to have another site to clean up and you may not be around
13 to clean it up.

14 MR. DION NOVAK: And the question there was -- was it
15 related to funding or was it related to have we analyzed
16 enough alternatives?

17 MS. ROSHECK: Okay. I don't feel you've analyzed
18 enough alternatives.

19 MR. DION NOVAK: I would encourage you to read the
20 Feasibility Study Report, because we did analyze a good
21 deal more alternatives than these and we screened them out
22 for various reasons. There's a table in here, and I will
23 refer you to it. Figure 4-1 in the Feasibility Study
24 looks at all of the alternatives that we did look at. And
25 it talks about a description and comments as to whether we

1 felt it would work or whether it would not work. And
2 there's quite a few more here than you see up there,
3 Because we felt these were the ones that would work. So
4 I'd encourage you to take a look at that.

5 MR. DAVE NOVAK: That's part of the reason why we're
6 accepting the comments during this comment period. If
7 there is something that we did miss maybe you can bring
8 something to light. So new things that you bring up we
9 are going to consider. Again, it's not the done deal just
10 because we're here talking about our preferred number six,
11 not a done deal yet.

12 MR. DION NOVAK: Keeping in mind again that we will
13 do what we do based on our funding. The State of Indiana
14 is going to handle the long term operation and maintenance
15 of this. If IDEM and EPA go away, then we're not going to
16 do anything. We can't. And that's out of our hands.

17 MR. DAVE NOVAK: Any other questions? Any other
18 comments?

19 MS. MILLER: I do have a comment. I would like to go
20 on record as saying that rather than having any water
21 discharged into Juday Creek I would prefer that we, for
22 the time being at least, use Alternative 2 and do nothing
23 except restrict the land somewhat, knowing that the
24 contaminated plume is going to continue to migrate, but
25 that will be picked up, and it simply means the city water

1 system will be expanded. And I want to go on record as
2 being in favor of that rather than putting any water
3 whatsoever into the creek.

4 MR. DAVE NOVAK: Thank you.

5 QUESTION: Will you be having another open public
6 meeting like this before any decisions are made?

7 MR. DAVE NOVAK: No. We're not planning -- I'm not
8 going to say it's absolute, but the plans are not. This
9 is the normal process. As you knew with Phase 1 and Phase
10 2 we came out and did the same basic process there; go
11 into the comment period, get the comments, do the
12 Responsiveness Summary, and then make a decision. Right
13 now, again, I'm not going to say it's absolute, but there
14 are no plans after this.

15 Yes, sir.

16 QUESTION: Have you done any more sampling of the
17 monitoring wells since this last summer?

18 MR. DION NOVAK: No. But, again, keep in mind that
19 as we get through the process, the design and the
20 construction of these remedies, we are going to be
21 monitoring, and then once the remedies are in place we
22 will monitor over the long term. Those are major
23 components of any of the alternatives that we're looking
24 at.

25 MR. DAVE NOVAK: And like I mentioned earlier,

1 something does affect the remedy that's chosen it will be
2 readdressed if there's something that's not working. So
3 we don't just implement the remedy, give it to IDEM, and
4 then walk away.

5 The lady back there. Yes, you.

6 MS. ROSHECK: Most of the comments that I have heard
7 have been negative toward discharging water into Juday
8 Creek. If after you have all of these comments in, and
9 most of them are negative, do you still -- you look at the
10 alternatives and decide what you feel is best without
11 regard to what our comments are as far as discharging
12 water into Juday Creek?

13 MR. DION NOVAK: As part of the process there is that
14 Responsiveness Summary where we take the comments that we
15 got and we respond to them and we show how those comments
16 were factored into the final decision. So you will see
17 that. That will be part of the final cleanup document is,
18 "Here's the comments that we got." "Here's how we
19 responded to the comments that were raised."

20 MR. DAVE NOVAK: Before the final decision is made,
21 once we get through the Responsiveness Summary and
22 everything else we go back and Dion sits down with his
23 immediate supervisors, and the IDEM folks also get
24 involved in this, and they hash it out. They look at all
25 these summaries. And then we have to go and brief the

1 Deputy Regional Administrator and the Regional
2 Administrator before this whole process is done yet. So
3 there's several more steps in the review after all these
4 comments are factored in. It's not that Dion's going to
5 take this back and say, "Okay, this is the one we're going
6 to go with." More people get involved yet.

7 MS. ROSHECK: I'm concerned the Department of Natural
8 Resources is not more involved.

9 MR. PLOMB: I, myself, included them in comments on
10 the Feasibility Study because I did want their input, and
11 I do wish that I would have gotten input from them. But
12 that window was not closed yet obviously. I was in
13 contact with them just yesterday, in fact, to try to get
14 comments that they had for the Feasibility Study, and they
15 did not have any for me at that time. But that does not
16 mean they're not working on it. And comments that they do
17 give me I will forward to Dion.

18 MR. DION NOVAK: And again, the gentleman said that
19 he was going to contact the Juday Creek representative,
20 and I encourage you to do that so we can get their input.
21 We welcome them..

22 MR. DAVE NOVAK: Just because DNR is not at the table
23 or in the room tonight doesn't mean they're not involved.
24 There's a lot of people -- health departments and whatnot
25 who we been talking to also, and all this is all factored

1 into this also.

2 MS. ROSHECK: I guess we're concerned because we work
3 with those people from the Department of Natural
4 Resources, a couple of people that are very knowledgeable
5 about Juday Creek, and neither one of them knew about the
6 meeting tonight. And I know Sandy was on the list. She
7 had written several letters and requested her name to be
8 on the list for information, and she didn't receive
9 information about this meeting tonight.

10 MR. DION NOVAK: We apologize for that.

11 MR. DAVE NOVAK: Who didn't?

12 MS. MILLER: I did not. I've asked for mailings. I
13 think Mr. Novak has received letters from me.

14 MR. DAVE NOVAK: I did get back, as a matter of fact
15 -- from the mailing that we sent out a couple weeks ago I
16 did get back about thirty for some various reason. I
17 didn't look at them all for the reason coming back, but
18 it's mailing lists that were used at the last meeting
19 which was just a couple of months ago -- from September.
20 I got maybe twenty or thirty back already with some
21 change. Now, I don't know why your name hasn't been put
22 on it, but if you did sign up tonight this does go back
23 into the mailing list and double checked. So we are
24 continuously monitoring that, too. Why you didn't get
25 your's, I don't know.

1 MS. MILLER: And I'm just the tip of the iceberg.
2 Because there are forty-five people in the Willowbrook
3 Addition and another nine or ten on McErlain and Juday
4 Lake Estates, and we will see that they get the comment
5 sheets and encourage them by letter to respond to all of
6 this.

7 MR. DAVE NOVAK: Please do so. That's the whole
8 purpose of our being here tonight.

9 MR. DION NOVAK: Keep in mind that people who aren't
10 here will also be submitting comments to us.

11 MR. DAVE NOVAK: Yes, sir.

12 MR. NORTON: I also didn't get any.

13 MR. DION NOVAK: You didn't get one either? You're
14 on our list?

15 MR. NORTON: Right.

16 MR. DION NOVAK: Sometimes --

17 MR. NORTON: Is that basis for calling another
18 public meeting?

19 MR. DAVE NOVAK: No. Because you've got the
20 information now. And you still have a -- well, I'm not
21 going to say no we're not going to come back.

22 MR. NORTON: I was just wondering, because that means
23 people that want to be informed were inadequately --

24 MR. DION NOVAK: I did send a copy of the Feasibility
25 Study. Did you get the copy of the Feasibility Study?

1 MR. NORTON: Yes.

2 MR. DION NOVAK: I did send that to you a couple
3 weeks ago.

4 MR. NORTON: I didn't get any notice of the public
5 meeting, though.

6 MR. DAVE NOVAK: That's why we put the notice in the
7 newspaper that we're going to have the meeting, that there
8 is a comment period, that there are repositories to
9 research the information. So it's not just tonight.
10 We're getting that information out. Why mail comes back
11 -- maybe the postman, I'm not accusing the post office,
12 maybe it got misplaced in his truck and sent back
13 erroneously, too. I don't know.

14 MS. ROSHECK: When was it advertised in the paper?

15 MR. DAVE NOVAK: What's the major local newspaper?

16 MS. ROSHECK: South Bend Tribune.

17 MR. DAVE NOVAK: Alright. I believe that was the
18 one.

19 MR. PLOMB: That's the one that we advertised in.
20 We called them right here. Probably be in tomorrow.

21 MR. DAVE NOVAK: I'm trying to think of what date.

22 MR. DION NOVAK: We are required to publish a notice
23 a couple weeks before the meeting.

24 MS. ROSHECK: Was it in the legal section? Is that
25 where you put it?

1 MR. DAVE NOVAK: No. We try to put it in the first
2 section of the newspaper, the news section of the
3 newspaper.

4 MR. DION NOVAK: They put it where they want to put
5 it. We have no control over that.

6 MR. DION NOVAK: Now, I have tried to think. It
7 typically goes in the South Bend Tribune, it typically
8 goes in the Metro section.

9 MS. ROSHECK: Right.

10 MR. DION NOVAK: That's where I've seen stuff before.
11 I was looking yesterday, I was looking today, and I didn't
12 see anything. We send the stuff to them. If they choose
13 to ignore us, you know, we can't force them to do that.

14 MS. ROSHECK: But I thought you were required to have
15 a paid advertisement-like.

16 MR. DAVE NOVAK: That is right. We do, yes.

17 MS. ROSHECK: If you paid for an advertisement they
18 would have had to put it in.

19 MR. DION NOVAK: We paid for advertising.

20 MR. DAVE NOVAK: We don't get a copy of that, so I
21 can't attest to it, but I want to say it was in like the
22 19th or 21st, somewhere around there. I'm not positive on
23 that. But we try to get it in two weeks prior to the
24 meeting so that you have enough time to plan your
25 schedules.

1 Yes, ma'am.

2 COMMENT: Usually it's in the paper the day before
3 or the day of the meeting.

4 MR. DAVE NOVAK: Well, we're bound by -- and the name
5 just --

6 COMMENT: Ten days ahead of the meeting it's supposed
7 to be advertised?

8 MR. DAVE NOVAK: Yes. That's a requirement.
9 Congress said we have to advertise, and our guidelines are
10 ten days to two weeks prior to the meeting. Now, if we
11 contracted with that paper to get that ad in there and
12 they did not we'll have to check into that. But it's very
13 seldom that we don't get the ad in that we put in there.

14 COMMENT: Usually the South Bend Tribune is quite
15 active about publishing anything concerning Juday Creek
16 because they know it's a hot stream.

17 MR. DION NOVAK: Dave, what we can do is we can check
18 to see when that was published.

19 MR. DAVE NOVAK: We'll find out exactly when it was
20 on that one.

21 COMMENT: Well, they had their TV people here
22 tonight. Maybe they're not talking to the news people.

23 MR. DION NOVAK: They got our notice.

24 COMMENT: Just a real quick comment. Thursday
25 there's going to be some major players from the DNR being

1 in town Thursday, and I got a meeting with one of them on
2 Thursday afternoon. We're going to present this to them a
3 little bit. If they would be inclined to have a meeting
4 would you gentlemen be free to attend one of their
5 meetings?

6 MR. DION NOVAK: If they wanted to invite us.

7 MR. DAVE NOVAK: Yeah, we're always happy to come
8 out. I said we're happy to come out. Whether we can or
9 not -- I haven't traveled in six weeks since the thing --
10 and Dion isn't traveling that much because of the
11 uncertainty of the budget.

12 MR. DION NOVAK: So keep in mind that when we come
13 out to do a meeting, and we advertise that -- we say we're
14 making ourselves available for a meeting such as this, we
15 have to advertise to everybody. If we come out and a
16 particular group wants to meet with us they have to
17 request that we come and do that. Because we can't say,
18 "We're coming down to meet with this group," because then
19 we're excluding everybody else. But if you request we
20 come down and attend some type of meeting, or phone call,
21 you know, we can certainly look at that.

22 MR. DAVE NOVAK: Questions or comments?

23 Yes, ma'am.

24 MS. MULDOON: My name is Shirley Muldoon, I'm a
25 resident in the area, and I'm curious to know how long ago

1 were these wells monitored for contamination?

2 MR. DION NOVAK: We did the bulk of our sampling and
3 monitoring in 1994.

4 MS. MULDOON: And what month was that? How long ago?

5 MR. PLOMB: August '94 was the last.

6 MS. MULDOON: So it's over a year. Don't you think
7 it's about time you did a little bit more investigation?
8 How fast does that contamination move? You say it is
9 coming southwest. Couldn't there be areas that are
10 contaminated now that weren't a year ago?

11 MR. DION NOVAK: It's possible.

12 MS. MULDOON: And can you make any specific
13 recommendation that perhaps more monitoring could be done?

14 MR. DION NOVAK: We are going to be doing monitoring
15 once we get these processes underway, yes.

16 MS. MULDOON: I know. But you're waiting for the
17 funding, and you don't know how long that will take, and
18 monitoring should --

19 MR. DION NOVAK: Well, we can't monitor without
20 money. We can't monitor without funding, because it costs
21 money to pick up a groundwater sample and take it to a
22 lab. Monitoring is a major component of all of these
23 alternatives, and we are going to continue to monitor from
24 now into the future as we implement these alternatives.

25 MS. MULDOON: Do you have any estimate how fast the

1 plume is moving?

2 MR. PLOMB: That's all written up in the Feasibility
3 Study.

4 MS. MULDOON: Can you give me an idea?

5 MR. PLOMB: Couple hundred feet a year.

6 MR. DION NOVAK: And we factored that into our
7 accounts when we chose the area that we're extending the
8 city water to. And keep in mind that the areas that are
9 downgrading of those areas that we're covering with city
10 water we're going to monitor over time as well.
11 Monitoring as shown under those areas are clean right now.
12 Over time we don't know. Once people in the area get
13 hooked up to city water their wells are no longer going to
14 be influencing wells and groundwater. Then what happens
15 after that we will need to figure out when we monitor,
16 because we don't know what's going to happen when all
17 those wells are shut off. That's why we monitor, to find
18 out where the groundwater's going to go down then. We
19 know where it's going now, but once you shut off all those
20 wells we need to figure out where it's going to go down.

21 MS. MULDOON: Do you know how deep the plume is?

22 MR. PLOMB: Now it ranges up to between forty and
23 sixty feet down.

24 MR. DION NOVAK: That's where that local groundwater
25 is, forty to sixty feet down.

1 MR. DAVE NOVAK: Any other questions? Yes, sir

2 QUESTION: What is the depth of groundwater at the
3 off-site plume?

4 MR. PLOMB: It ranges quite a bit from near zero to
5 ten or fifteen feet below ground.

6 QUESTION: Ten or fifteen feet off-site?

7 MR. PLOMB: Yes.

8 MR. DAVE NOVAK: Anybody else? Again, the book is
9 quite thick, the Feasibility Study, and it is in the
10 Mishawaka Public Library, at 209 Lincoln Way East, and
11 you're welcome to go in there and look at it and see for
12 yourself what information is contained in there. Again,
13 the comment period is going through December 26th. Our
14 addresses and phone numbers are in the back of the fact
15 sheet. We'll both welcome any calls and your comments.
16 Continue to write if you have additional comments to those
17 addresses.

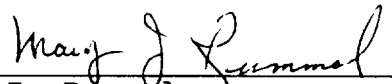
18 If there are any more questions or comments
19 we'll take them now, otherwise we thank you for coming
20 this evening. And it will take severall weeks to get that
21 Responsiveness Summary. And the Record of Decision is
22 down the road. Right now we don't know what that's going
23 to be. Thank you.

24

25 (Meeting adjourned at 9:00 p.m.)

C E R T I F I C A T E

I, Mary J. Rummel, being a shorthand reporter and Notary Public in and for the County of St. Joseph and the State of Indiana, do hereby certify that I did report in machine shorthand the foregoing United States Environmental Protection Agency Public Hearing regarding the Douglas Road Landfill Superfund Site, held at Walt Disney Elementary School, 4015 North Filbert Road, Mishawaka, Indiana, on Tuesday, December 5, 1995, commencing at 7:00 p.m., and I believe the foregoing is a true and correct transcription of my said stenographic notes.



Mary J. Rummel
Court Reporter

Dated: January 2, 1996